IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl. No. : 09/759,486
Appellant(s) : PELLETIER, Daniel
Filed : 12 January 2001
Title : METHOD AND APPARATUS FOR DETERMINING CAMERA MOVEMENT CONTROL CRITERIA

TC/A.U. : 2615
Examiner : JONES, Heather R.

Atty. Docket : US 010002

APPELLANT'S REPLY

Board of Patent Appeals and Interferences
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Reply of Appellant is in response to the Examiner's Answer dated 16 November 2006. All requisite fees set forth in 37 CFR 1.17(c) are hereby authorized to be charged to Deposit Account No. 14-1270.

Correction of Claim Status

The withdrawal of the rejection of claims 18 and 19 is noted with appreciation.

Rejection of claims 1, 3-7, 9-12, 16 and 17 as being anticipated under 35 USC 102(e) by Chim

Regarding Appellant's argument that Chim does not disclose selecting at least one sequence of camera parametrics from a plurality of sequences of camera parametrics, including scanning, zooming, tilting, orientating, panning, fading, zoom-and-pull-back, fade-in and fade-out, as called for by Appellant's claims 1 and 7, the Examiner has responded that Chim discloses two camera parametrics, panning and zooming, which could be used in any sequence, the different sequences being: zoom only, pan only, zoom and then pan, or pan and then zoom. EX ANS, p. 8.

However, Chim does not select the sequence of pan and zoom operations. These operations are automatically called into play as the system tracks a speaker through sound triangulation techniques.

Regarding Appellant's argument that Appellant's claims require 'determining criteria for executing said selected sequence of camera parametrics', whereas Chim's criteria for camera movement is not determined, but rather has been predetermined, and is always the same, i.e., the stabilization of the relative strength of audio signals from a set of microphones, the Examiner has responded that since the camera uses sound to adjust the focus of the camera, it would not be able to predetermine the movement of the speaker. EX ANS, p. 8.

However, Appellant did not state that Chim is able to predetermine the movement of the speaker, but rather that Chim's criteria for camera movement are predetermined.

Regarding Appellant's argument that Chim is not able to determine the number of objects in a scene or the position of objects in a room, the Examiner has responded that Chim can determine the current speaker from several different speakers from the different signal levels transmitted by the microphones, citing col. 4, lines 63-67 of the reference. EX ANS, p. 9.

However, Chim only provides for determining the location of an object based on sounds detected from that object. Thus, Chim states at col. 4, lines 63-67: 'Using triangulation techniques and stereophonic microphones, the present invention provides a natural transition when tracking different speakers and is able to precisely determine **the position of each speaker when they are talking.**' (emphasis added).

The Examiner has also responded that if two different sounds are coming from two different areas of the room, the apparatus would be able to determine that there are two objects in the room. EX ANS, p. 9.

However, the apparatus as disclosed by Chim only has the ability to track the location of one sound. If more than one sound is detected, the triangulation technique would either track the loudest sound or be confused and defeated. Chim provides no means to independently track the locations of multiple sounds.

The Examiner has also stated that if two different sounds are coming from different places in the room, the apparatus would be able to determine that there are two objects in the room. EX ANS, p. 9.

However, this statement assumes that the apparatus would be able to independently track the locations of two different sounds, which it cannot.

The Examiner has also stated that determining the positions of objects in a room goes hand in hand with determining how many objects are in a room. EX ANS, p. 9.

However, this statement assumes that the apparatus would be able to independently track the locations of two different sounds, which it cannot.

The Examiner has also stated that Appellant's claims only require the location of at least one object in a scene, which is what Chim does when he locates the speaker.

However, the Examiner is equating 'object' with 'object which emits sound', i.e., speakers. Appellant's claims are not limited to objects which emit sound, *inter alia*, because Appellant's invention is not limited to or based on location of a speaker through sound triangulation techniques.

The Examiner has stated that the word 'object' is being used to define speaker because that is the 'main focus' of Chim. EX ANS, p. 9.

However, this statement merely acknowledges the shortcomings of the Chim reference.

The Examiner has stated that the claims have no limitation as to the meaning of 'object' so that it may be examined using the broadest interpretation. EX ANS, p. 10.

Thus, the Examiner is correct that the term 'object' as used by Appellant includes 'speaker', but incorrect in attempting to broaden the meaning of 'speaker' in Chim to include 'object', i.e., an object which does not emit sound.

Regarding Appellant's argument that Chim does not disclose speech recognition, Appellant acknowledges that Chim discloses that:

The interface card 18 may include circuitry for sensing and differentiating tone and for tracking a speaker 20 having a selected tone. This would aid with tracking the speaker 20, particularly in the presence of ambient noise, such as when the remote location 22 comprises an auditorium. The interface card 18 may also include filter circuitry to additionally help with tracking the particular speaker 20 in the presence of ambient noise in order to facilitate the sensing and tracking of a particular voice. (col. 8, lines 15-22).

However, 'speech recognition' is a recognized term of art which is known to mean the recognition of the content of speech, not merely the presence of speech. Chim does not employ the term 'speech recognition', nor does Chim teach that his circuitry is able to determine the content of the speech, but only characteristics of the speech, e.g., tone, which would tend to distinguish it from other audio signals.

For all of the above reasons, claims 1, 3-7, 9-12 and 16-19 are not anticipated by Chim, and Appellant respectfully requests that the rejection be reversed.

Rejection of claims 13-15 as being unpatentable under 35 USC 103(a) over Chim, as applied to claim 7 above, and further in view of Steinberg

Although Chim does not disclose outputting the criteria for camera movement through a serial connection, a parallel connection or a network, Steinberg is cited to show such a teaching.

While not conceding the patentability per se of claims 13-15, it is urged that these claims are patentable by virtue of their dependency on claim 7.

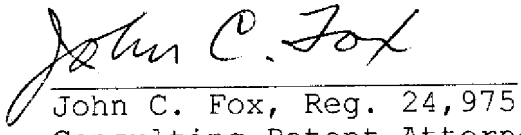
Accordingly, the rejection of claims 13-15 under 35 USC 103(a) is in error and Appellant respectfully requests that the

rejection should be reversed.

CONCLUSION

The rejection of claims 1, 3-7, 9-12, 16 and 17 under 35 USC 102(e) as being anticipated by Chim (U.S. patent 6,275,258) and the rejection of claims 13-15 as being unpatentable under 35 USC 103(a) over Chim in view of Steinberg et al. (U.S. patent 6,750,902) are both in error for the reasons advanced above. Accordingly, Appellant respectfully requests that the Board of Patent Appeals and Interferences reverse the rejections.

Respectfully submitted,



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